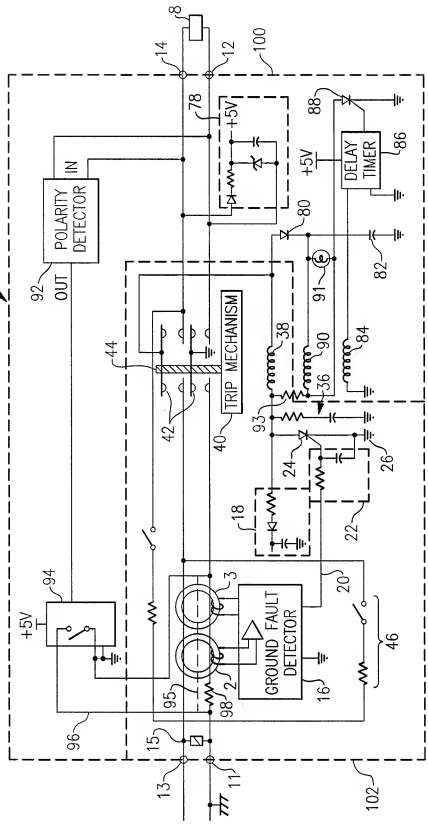
10
POLARITY DETECTOR
IN
OUT
92
TRIP MECHANISM
GROUND FAULT DETECTOR
DELAY TIMER
+5V
94
96
95
98
15
13
11
102
16
18
20
22
24
26
36
38
40
42
44
46
78
80
82
84
86
88
90
91
93
100
12
14
8
3
2

FIG.1

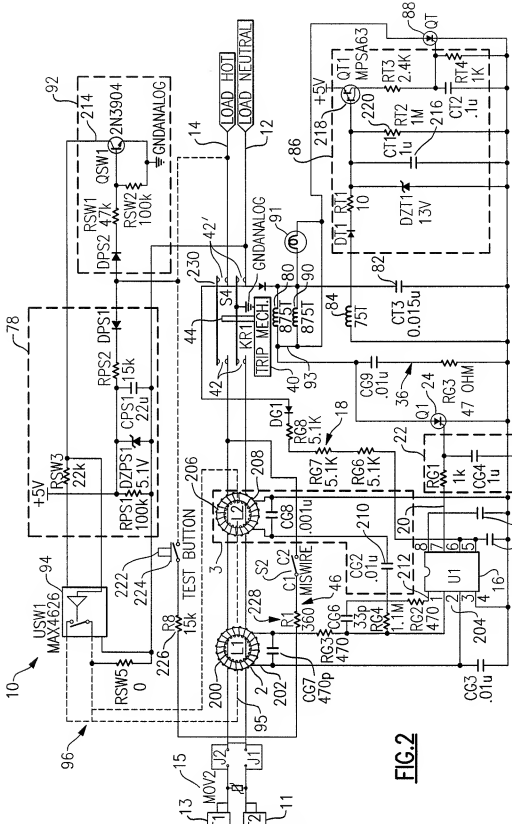
10
USW1
MAX4626
94
96
RSW5
0
226
R8
15k
TEST BUTTON
222
224
78
RSW3
22k
+5V
RPS1
100k
DZPS1
5.1V
RPS2
15k
CPS1
22u
DPS1
DPS2
92
214
QSW1
2N3904
RSW1
47k
RSW2
100k
GNDANALOG
206
208
200
202
95
228
L1
L2
S2
C1
C2
MISWIRE
R1
360
RG3
470
CG7
470p
CG8
.001u
CG2
.01u
CG6
33p
R84
1.1M
RG2
470
U1
CG1
.33u
CG3
.01u
CG4
1u
CC5
.0015u
RG1
1k
RG7
5.1K
RG6
5.1K
RG8
5.1K
DG1
Q1
RG3
47 OHM
CG9
.01u
CT3
0.015u
82
84
75T
875T
875T
80
90
91
S4
KR1
TRIP MECH
42
42'
44
40
93
230
14
12
LOAD HOT
LOAD NEUTRAL
GNDANALOG
86
218
+5V
DT1
RT1
10
DZT1
13V
CT1
1u
RT2
1M
216
220
QT1
MPSA63
RT3
2.4K
CT2
.1u
RT4
1K
88
QT
15
MOV2
13
T1
T2
J2
J1
11
17
16
204
CG1
.33u
CG3
.01u
CG4
1u
CC5
.0015u
GNDANALOG

FIG.2

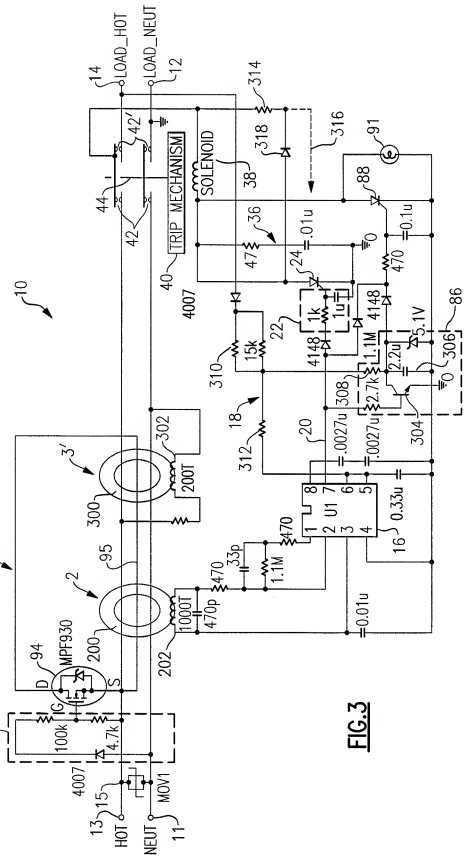
10
LOAD_HOT
14
LOAD_NEUT
12
TRIP MECHANISM
SOLENOID
40
38
42
44
42'
314
316
318
91
88
36
47
24
.01u
0
470
.01u
4007
22
15k
1k
1uf
4148
4148
1.1M
2.2u
5.1V
86
306
310
2.7k
308
304
18
312
20
.0027u
.0027u
U1
8
7
6
5
1
2
3
4
16
0.33u
470
33p
1.1M
.01u
96
95
2
300
302
200T
3'
1000T
470p
202
200
D
MPF930
94
S
G
92
100k
4.7k
4007
15
MOV1
13
HOT
NEUT
11

FIG.3

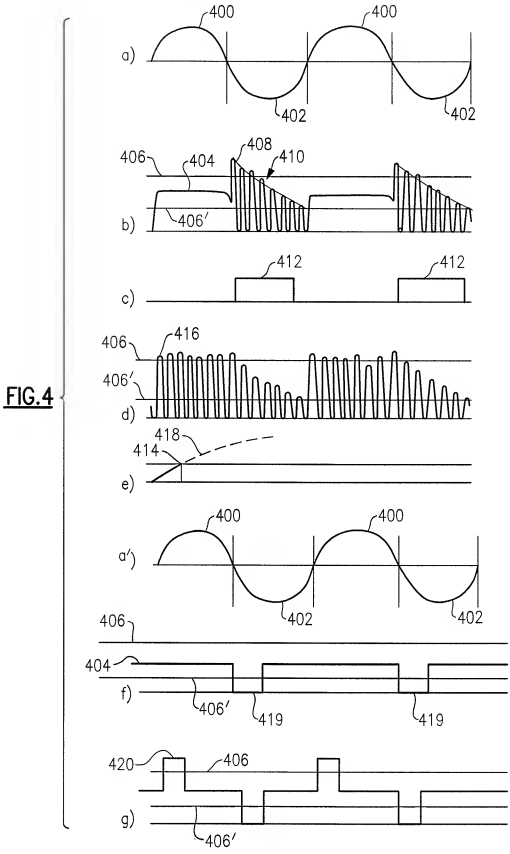
400
400
a)
402
402
406
404
408
410
406′
b)
412
412
c)
406
416
406′
d)
418
414
e)
400
400
a′)
402
402
406
404
f)
406′
419
419
420
406
g)
406′

FIG.4

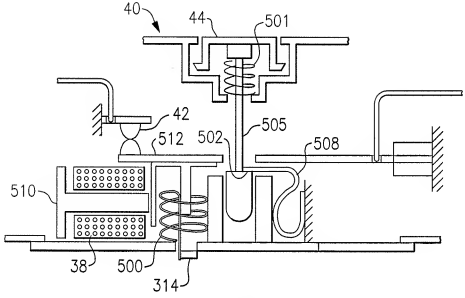
40
44
501
42
512
502
505
508
510
38
500
314

FIG.5

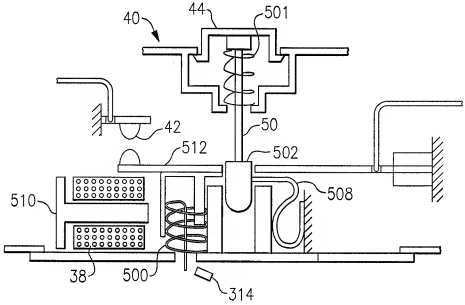
40
44
501
42
50
512
502
508
510
38
500
314

FIG.6

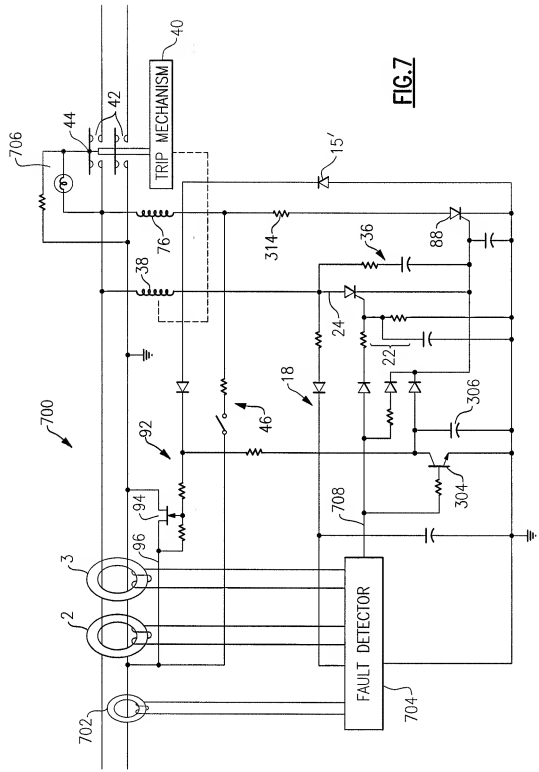
700
702
704
706
708
2
3
TRIP MECHANISM
FAULT DETECTOR
40
42
44
46
76
88
92
94
96
304
306
314
15'
18
22
24
36
38

FIG.7